

# PCT

## REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference  
(if desired) (12 characters maximum) 05-F-013PCT

**Box No. I TITLE OF INVENTION**

DNA ARRAY AND METHOD FOR DETECTING SINGLE NUCLEOTIDE POLYMORPHISM

**Box No. II APPLICANT**

☐ This person is also inventor

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)  
TOYOBO CO., LTD.  
2-8, Dojimahama 2-chome, Kita-ku, Osaka-shi, Osaka 530-8230,  
JAPAN

Telephone No.  
06-6348-3704

Facsimile No.  
06-6348-3393

Teleprinter No.

Applicant's registration No. with the Office

State (that is, country) of nationality:

JAPAN

State (that is, country) of residence:

JAPAN

This person is applicant  
for the purposes of:

☐

all designated  
States

☒

all designated States except  
the United States of America

☐

the United States  
of America only

☐

the States indicated in the  
Supplemental Box

**Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)**

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

NGK INSULATORS, LTD.  
2-56, Suda-cho, Mizuho-ku, Nagoya-shi, Aichi 467-8530 Japan

This person is:

☒

applicant only

☐

applicant and inventor

☐

inventor only (If this check-box is  
marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

JAPAN

State (that is, country) of residence:

JAPAN

This person is applicant  
for the purposes of:

☐

all designated  
States

☒

all designated States except  
the United States of America

☐

the United States  
of America only

☐

the States indicated in  
the Supplemental Box

☒

Further applicants and/or (further) inventors are indicated on a continuation sheet.

**Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒

agent

☐

common  
representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

NISHIZAWA Toshio  
Three F Minami Bldg. 7F,  
11-1, Minami-Aoyama 6-chome, Minato-ku  
Tokyo 107-0062, JAPAN

Telephone No.

03-5778-0201

Facsimile No.

03-5778-0202

Teleprinter No.

Agent's registration No. with the Office

☐

Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

**Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)**

*If none of the following sub-boxes is used, this sheet should not be included in the request.*

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

KAWASE Mitsuo  
c/o NGK INSULATORS, LTD.  
2-56, Suda-cho, Mizuho-ku, Nagoya-shi, Aichi 467-8530 Japan

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality: JAPAN

State (that is, country) of residence: JAPAN

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

YOSHIDA Yasuko  
c/o NGK INSULATORS, LTD.  
2-56, Suda-cho, Mizuho-ku, Nagoya-shi, Aichi 467-8530 Japan

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality: JAPAN

State (that is, country) of residence: JAPAN

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

YAMADA Kazunari  
c/o NGK INSULATORS, LTD.  
2-56, Suda-cho, Mizuho-ku, Nagoya-shi, Aichi 467-8530 Japan

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality: JAPAN

State (that is, country) of residence: JAPAN

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

TAKARADA Yutaka  
c/o TOYOBO CO., LTD. TSURUGA INSTITUTE OF BIOTECHNOLOGY  
10-24, Toyo-cho, Tsuruga-shi, Fukui 914-0047, Japan

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality: JAPAN

State (that is, country) of residence: JAPAN

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

☒ Further applicants and/or (further) inventors are indicated on another continuation sheet.

**Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)**

*If none of the following sub-boxes is used, this sheet should not be included in the request.*

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

HASHIMOTO Kouzo  
c/o TOYOBO CO., LTD.  
2-8, Dojimahama 2-chome, Kita-ku, Osaka-shi, Osaka 530-8230,  
JAPAN

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only *(If this check-box is marked, do not fill in below.)*

Applicant's registration No. with the Office

State *(that is, country)* of nationality: JAPAN

State *(that is, country)* of residence: JAPAN

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only *(If this check-box is marked, do not fill in below.)*

Applicant's registration No. with the Office

State *(that is, country)* of nationality:

State *(that is, country)* of residence:

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only *(If this check-box is marked, do not fill in below.)*

Applicant's registration No. with the Office

State *(that is, country)* of nationality:

State *(that is, country)* of residence:

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only *(If this check-box is marked, do not fill in below.)*

Applicant's registration No. with the Office

State *(that is, country)* of nationality:

State *(that is, country)* of residence:

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on another continuation sheet.

**Box No. V DESIGNATIONS**

The filing of this request constitutes under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.

However,

- ☐ DE Germany is **not designated** for any kind of national protection
- ☐ KR Republic of Korea is **not designated** for any kind of national protection
- ☐ RU Russian Federation is **not designated** for any kind of national protection

*(The check-boxes above may be used to exclude (irrevocably) the designations concerned in order to avoid the ceasing of the effect, under the national law, of an earlier national application from which priority is claimed. See the Notes to Box No. V as to the consequences of such national law provisions in these and certain other States.)*

**Box No. VI PRIORITY CLAIM**

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application:* regional Office	international application: receiving Office
item (1) 19/3/2004	2004-081034	JAPAN		
item (2)				
item (3)				

- ☐ Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office) identified above as:

- ☒ all items      ☐ item (1)      ☐ item (2)      ☐ item (3)      ☐ other, see Supplemental Box

\*Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)).

**Box No. VII INTERNATIONAL SEARCHING AUTHORITY**

**Choice of International Searching Authority (ISA)** (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA JP

**Request to use results of earlier search; reference to that search** (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year)

Number

Country (or regional Office)

**Box No. VIII DECLARATIONS**

The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):

		Number of declarations
<input type="checkbox"/> Box No. VIII (i)	Declaration as to the identity of the inventor	:
<input type="checkbox"/> Box No. VIII (ii)	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	:
<input type="checkbox"/> Box No. VIII (iii)	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	:
<input type="checkbox"/> Box No. VIII (iv)	Declaration of inventorship (only for the purposes of the designation of the United States of America)	:
<input type="checkbox"/> Box No. VIII (v)	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty:	:

**Box No. IX CHECK LIST; LANGUAGE OF FILING**

This international application contains:

(a) **on paper**, the following number of sheets:

request (including declaration sheets) : 5

description (excluding sequence listings and/or tables related thereto) : 19

claims : 2

abstract : 1

drawings : 5

**Sub-total number of sheets** : 32

sequence listing : 15

tables related thereto :  
(for both, actual number of sheets if filed on paper, whether or not also filed in electronic form; see (c) below)

**Total number of sheets** : 47(b) ☐ **only in electronic form**  
(Section 801(a)(i))

(i) ☐ sequence listing

(ii) ☐ tables related thereto

(c) ☐ **also in electronic form**  
(Section 801(a)(ii))

(i) ☐ sequence listing

(ii) ☐ tables related thereto

**Type and number of carriers** (diskette, CD-ROM, CD-R or other) on which are contained the

☐ sequence listing

☐ tables related thereto

(additional copies to be indicated under item 9(ii) and/or 10(ii), in right column)

This international application is **accompanied** by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):

Number of items

1. ☒ fee calculation sheet : 2
2. ☒ original separate power of attorney : 7
3. ☐ original general power of attorney :
4. ☐ copy of general power of attorney; reference number, if any:..... :
5. ☐ statement explaining lack of signature :
6. ☐ priority document(s) identified in Box No. VI as item(s):..... :
7. ☐ translation of international application into (language):..... :
8. ☐ separate indications concerning deposited microorganism or other biological material :
9. ☒ sequence listing in electronic form (indicate type and number of carriers)
  - (i) ☒ copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application) : 1
  - (ii) ☐ (only where check-box (b)(i) or (c)(i) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter :
  - (iii) ☒ together with relevant statement as to the identity of the copy or copies with the sequence listing mentioned in left column : 1
10. ☐ tables in electronic form related to sequence listing (indicate type and number of carriers)
  - (i) ☐ copy submitted for the purposes of international search under Section 802(b-quater) only (and not as part of the international application) :
  - (ii) ☐ (only where check-box (b)(ii) or (c)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quater) :
  - (iii) ☐ together with relevant statement as to the identity of the copy or copies with the tables mentioned in left column :
11. ☐ other (specify):.....

**Figure of the drawings** which should accompany the abstract: 1**Language of filing** of the international application:**Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE**

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

For receiving Office use only

1. Date of actual receipt of the purported international application:	2. Drawings:  <input type="checkbox"/> received:  <input type="checkbox"/> not received:
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:	
4. Date of timely receipt of the required corrections under PCT Article 11(2):	
5. International Searching Authority (if two or more are competent): <b>ISA /JP</b>	
6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid	

For International Bureau use only

Date of receipt of the record copy by the International Bureau: